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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,397	12/28/2001	Konstantinos Poulakis	42120	8736

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Mark S Bicks
Roylance Abrams Berdo & Goodman
Suite 600
1300 19th Street NW
Washington, DC 20036

EXAMINER

MUSSER, BARBARA J

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/019,397

Applicant(s)

POULAKIS, KONSTANTINOS

Examiner

Barbara J. Musser

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 25 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-26,28 and 29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-26,28 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 12-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not disclose the hardness of the polymers is measured in Shore A. For applicant to be able to make this change to the claims and specification, one skilled in the art must not only recognize it is an obvious error, but the also recognize the appropriate correction(MPEP 2163). Applicant has not shown that one in the art would recognize Shore A to be the appropriate hardness measurement.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what is meant by cut out areas between the shaped strip and the cushion since they are missing parts of the strip.

Response to Amendment

5. The declaration filed on 5/11/04 under 37 CFR 1.131 has been considered but is ineffective to overcome the applied reference.

6. The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the Schulte reference. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897). The declaration does not show the anti-slip materials being softer than the core materials. Also, the declaration only swears back to May 20, 1999, while a publication of the reference was published in South Africa(ZA) on March 31, 1999. Finally, the declaration does not explain the translation such that the examiner can understand what is being shown.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 11, 15, 17, and 28 are rejected under 35 U.S.C. 103(a) as being obvious over Esler(U.S. Patent 3,876,495).

Esler discloses a flexible cord for seats which has a core formed from polymer fibers which is covered in an extruded foam coating which reduces the slippage of the cord.(Col. 2, ll. 2-17; Col. 3, ll. 48-50; Col. 6, ll. 57) The material is capable of securing a cover to a cushion. The coating increases tear resistance since it decreases the slippage. It is noted that the claim does not require the insertion of the cord into the cushion, but rather only that it is capable of doing so. It is also noted that welting strips such as that of Esler are conventionally covered with a fabric having a tail extending therefrom, and the tail is inserted into a longitudinal passage in the cushion, thereby inserting the shaped strip into the passage. While the reference does not disclose the hardnesses of the core or foam coating, one in the art would appreciate that a foam coating which is intended to be velvety and flexible(Col. 3, ll. 41) would be softer than a material which is intended to be reinforcing(Col. 2, ll. 23) particularly since reinforcing implies that the core is stronger than the foam by itself.

Regarding claims 17 and 28, extrusion is considered a hot coating method.

9. Claims 11, 15, 17, 20-24, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulte(ZA 9805087A) in view of Esler, and Maruyama. U.S Patent 6,478,382 is considered an English language translation of ZA 9805087A and all column and line numbers refer thereto.

Schulte discloses a flexible shaped strip which serves to secure a cover to a foamed seat cushion having a longitudinal slit into which the strip is applied.(Figure 1;

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Abstract; Col. 1, ll. 6-13; Col. 4, ll. 3) The part of the strip containing the slit into which the cover is inserted is provided with an anti-slip means.(Col. 3, ll. 52-57) The reference does not disclose what these anti-slip means are. Esler discloses coating a strip used in seats with a foam material to prevent slippage of the strip relative to the material surrounding it.(Col. 2, ll. 2-17; Col. 3, ll. 48-50) Maruyama et al. discloses applying a rubber layer to the outside of a wire which is a strip which secures a cover to a foamed seat cushion.(Col. 2, ll. 4-11; Col. 3, ll. 27-30) Rubber is an anti-slip material and applicant's claim 22 indicates it is considered a plastic material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to coat the shaped strip of Schulte with a material which is anti-slip as shown in Esler since Esler discloses coating a plastic core with a plastic material to prevent slippage of the strip when used in a seat cushion, and since Maruyama et al. discloses it is known to coat strips that perform the same function, namely holding seat covers in seat cushions, with rubber which is an anti-slip material. While the reference does not disclose the hardnesses of the core or anti-slip coating, Esler shows the anti-slip coating is intended to be velvety and flexible(Esler, Col. 3, ll. 41) while the strip is intended to be reinforcing(Esler, Col. 2, ll. 23), clearly suggesting the anti-slip coating is softer than the core. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the anti-slip coating softer than the core since Esler shows the coating is softer than the core, and since this would place a softer material in contact with the person sitting in the chair while retaining the strength(hardness) necessary to prevent the strip from breaking by forming the core of a harder material.

Regarding claims 17 and 28, extrusion is considered a hot coating method.

Regarding claims 20 and 21, the references do not disclose curing the coating using ultraviolet or electron beam radiation. One in the art would appreciate that any type of material that would form a relatively soft anti-slip coating could be used. Such materials include rubbers, which should be cured to be usable. Since thermal curing would melt the plastic the rubber is coated on, one in the art would appreciate that a different type of cure such as ultraviolet, which is well-known in the curing arts, would be used in place of a thermal cure for rubber coatings. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use ultraviolet radiation to cure the coating on the shaped strip since this would allow curing of the coating without exposing the strip to high temperatures that would degrade the polymer used as the base for the strip and since ultraviolet and electron beam curing are well-known and conventional in general in the bonding arts as curing methods.

Regarding claim 22, while Schulte is silent as to the specific material of the anti-slip means, Esler discloses the foam can be made from polyurethane.(Col. 4, ll. 11) Since polyurethane foam was created to replace natural rubber, one in the art would appreciate that it is a rubber-type plastic. Additionally Maruymama shows the use of rubber as an anti-slip coating.

Regarding claim 23, Schulte discloses the anti-slip means are located on the sides and top of the shaped strip while the bottom has increased slip to allow easy placement in a groove in the seat cushion. One in the art reading the reference as a whole would appreciate that the sides of the shaped strip, if coated with an anti-slip

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material, would make it difficult to place the strip in the groove since the sides of the strip would contain the sides of the groove, and the anti-slip coating would prevent them from moving relative to one another. Therefore, one in the art reading the reference as a whole would appreciate that the sides of the strip could be made without anti-slip coating to allow easy placement of the strip in the groove.

Regarding claim 9, the profile of the shaped strip is round.(Figure 1)

10. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 11 above, and further in view of Tolle(U.S Patent 4,057,956).

The references cited above do not disclose the hardness of the anti-slip material. Tolle discloses forming an anti-slip layer on a cable wherein the coating has a hardness of 60-70 so that it will be flexible but hard enough to prevent tearing and wear of the coating during use.(Col. 2, ll. 60-61; Col. 3, ll. 55-61) It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the anti-slip layer have a hardness of about 60-70 since this would make it flexible but hard enough to prevent tearing and wear of the coating during use.(Col. 2, ll. 60-61; Col. 3, ll. 55-61)

11. Claims 16, 18, 19, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claim 11 above, and further in view of Engelson(U.S. Patent 5,095,915).

The references cited above do not disclose how the coating is applied to the strip. Engelson discloses that coatings can be conventionally applied to thin strips by extrusion or dip coating.(Col. 4, ll. 31-37) It would have been obvious to one of ordinary

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skill in the art at the time the invention was made to use any conventional coating method to apply the anti-slip material to the shaped strips such as extrusion or dip coating since they are conventional methods of applying coatings to thin strips(Col. 4, ll. 31-37) or to coextrude the two layer as such is a well-known and conventional method of forming a bi-component strip.

Regarding claims 25 and 26, while the references do not indicate applying the anti-slip material as flakes or clots, one in the art would appreciate that any conventional coating method could be used to apply the material.

Response to Arguments

12. Applicant's arguments filed 1/25/04 have been fully considered but they are not persuasive.

Regarding applicant's argument that Schulte is not prior art, applicant's declaration does not swear behind the earliest date for the Schulte reference, March 31, 1999. The data applicant provided does not appear to show the coating is softer than the strip itself and it is difficult to understand what is shown as there is no explanation of the data pages.

Regarding applicant's argument that Esler does not disclose that the strip formed could or should be used to secure a cover to a foam cushion, the structure of the reference is the same as that of applicant and therefore is capable of performing the same functions. For example, trim is often used to edge dresses, but that does not mean it is not capable of being attached to a card and used as a decorative material

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even if no reference suggested that. The material of the reference must simply be capable of performing the same function as that of applicant, i.e. it must be small enough that it can be inserted into a seat cushion, have an anti-slip coating on the surface, and not adversely react with the foam to destroy it in any way. The cord of Esler is small enough to be inserted in a seat cushion, has an anti-slip coating, and there is no indication it would destroy the cushion. Therefore, absent evidence that the cord is not capable of securing a cover to cushion, it is considered to be capable of such. It is suggested that claim 29 be added to the independent claim to more clearly distinguish over Esler. Addition of claim 29 to the independent claim would remove rejections having Esler as the primary reference.

13. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Esler discloses coating a strip with another layer which prevents slippage of the strip relative to the material surrounding it.

Regarding applicant's argument that the wire of Maruyama is not directly engaged with the foam, the wire performs the same function, i.e. it holds the cover in place. Applicant's claims do not require the surface of the wire to directly contact the

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seat cushion. As shown in Maruyama, a cord can be used to secure a covering to a foam cushion which has a longitudinal passage therein without directly contacting the foam. The reference shows there are alternate methods of performing the same function, securing a cover to a cushion, which meet the claim limitations.

14. In response to applicant's argument that Esler is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the reference is both in applicant's field of endeavor, the making of seat cushions, and reasonably pertinent to applicant's problem, namely the slippage between components in a seat cushion. The slippage in Esler is relative to the fabric comprising the cover and not the seat cushion itself, but it is clearly pertinent since it shows how others also manufacturing the same product dealt with the same type of problem.

Regarding applicant's argument that examiner does not show the use of ultraviolet and electron beam curing in applicant's specific environment, they are well-known and conventional in general in the bonding arts.

Regarding applicant's argument that Esler does not show slip prevention in a slot relative to surrounding material, the claims do not require that. All they require is that it be capable of doing such. Since the strip of Esler is located within a strip of fabric, it shows slip prevention relative to the surrounding material.

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15. In response to applicant's argument that Tolle is nonanalogous art since it is directed to steel cables, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the reference is reasonably pertinent to applicant's problem, the prevention of slip between two materials.

16. In response to applicant's argument that Engelson is nonanalogous art, the reference is to show what is well-known and conventional in the art. While not in applicant's field of endeavor, this reference shows what is conventional in coating, which is reasonably pertinent to applicant's invention as applicant's invention is coating a strip. The reference shows various methods of coating a small strip of material.

Conclusion

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara J. Musser whose telephone number is (571) 272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571)-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



BJM



SAM CHUAN YAO
PRIMARY EXAMINER